

ABSTRACT

The present invention relates to an amorphous silica-based coating film with a low specific dielectric constant of 2.5 or below and the Young's modulus of 6.0 GPa or more and having excellent hydrophobic property, and to a method of forming the same. A liquid composition containing a silicon compound obtained by hydrolyzing tetraalkyl ortho silicate (TAOS) and specific alkoxysilane (AS) in the presence of tetraalkyl ammonium hydroxide (TAAOH) is prepared. The liquid composition is then applied on a substrate, heated and cured to obtain a coating film. The coating film obtained as described has a smooth surface and also has specific micropores therein.